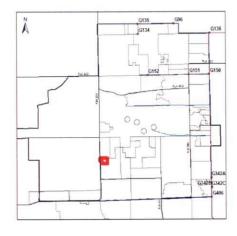
APPENDIX A: REVIEW OF AVAILABLE DATA



C-139 Everglades WOD Permit Number:

26-00301-E

William G. Culligan

Area:

Basin 26-301-01

194 acres

Land-use:

Residential and Pasture (194 ac)

Related Permits:

There are no related ERP or WU permits.

Surface Water Management System:

The farm is wooded with some depressional wetlands. There is no point discharge since the drainage swale was plugged at the eastern extent of the property (boundary with Basin 26-314-01). There is potential for overland flow into the basin from the north (Basin 26-324-01) through the Devil's Garden Slough.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-301-01):

No Nutrients Imported via Direct Land Application

Level III (Basin 26-301-01):

- No Nutrients Imported via Direct Land Application
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density





Level IV (Basin 26-301-01):

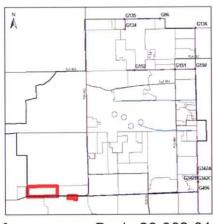
- No Nutrients Imported via Direct Land Application
- No Nutrients Imported Indirectly through Cattle Feed
- Particulate Matter and Sediment Controls (2)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density

Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-301-01





C-139 Everglades WOD Permit Number: **26-00302-E**

Collier Groves, Ltd.

Area:

Basin 26-302-01

Basin 26-302-02

1822 acres

1882 acres total with 144 acres in the C-139 Basin

Land-use: Citrus groves (1966 ac)

Related Permits:

26-00300-S Authorizes the construction of a surface water management system for both basins.

26-00630-W Authorizes an annual allocation of 1,295 million gallons of groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

Basin 26-302-01 is entirely within the C-139 basin. The surface water management system in the north farm contains a 180 acre reservoir with a discharge to the Deer Fence canal via a 30" diameter drop-inlet riser with the crest elevation at 24.5' NGVD.

Basin 26-302-02 is 1882 acres however only 144 acres of the farm are identified as within the C-139 basin. The basin has a reservoir from which a "splitter" structure sends a portion of the discharge north into the Deer Fence canal and a portion south to the Boggy Slough. The splitter structure consists of a 1.5' drop inlet with a crest elevation of 24.0' NGVD from the reservoir into a discharge separation basin. From the discharge separation basin there is a 1.0' diameter drop inlet structure with a crest elevation of 22.0' NGVD that discharges a volume of water (equal to the runoff from approximately 144 acres of the grove north) into the Deer Fence canal.

Best Management Practices (BMP) Plan:

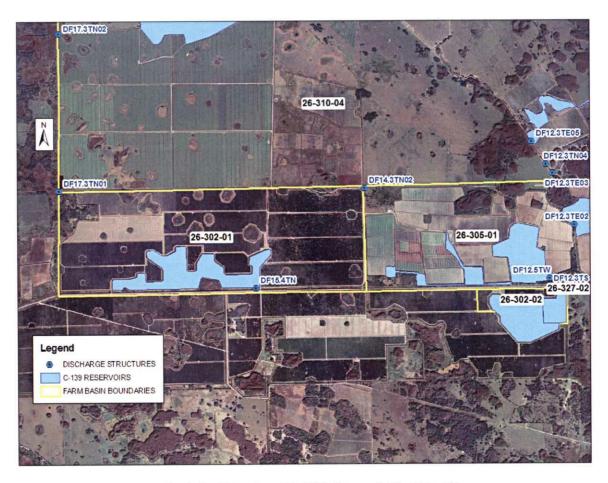
Level I, II, III and IV (Basin 26-302-01 and 26-302-02):

- Approved and Operational Surface Water Reservoir (5.2.1)
- Approved and Operational Surface Water Reservoir (6.2)
- Approved and Operational Surface Water Reservoir (6.3)





Projected Modifications to the Surface Water Management System:



Aerial of Basins 26-302-01 and 26-302-02



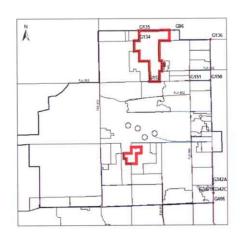


Southwest corner of the Crow's Nest Grove North (southwest corner of C-139 Basin)



Western edge of the Crow's Nest Grove North (western boundary of C-139 Basin)





C-139 Everglades WOD Permit Number:

26-00303-E

ABC Ranch

Area:

Basin 26-303-01

6,623 acres

Basin 26-303-03

1.163 acres

Land-use: Pasture and Native (7,786 ac)

Related Permits:

26-00013-R 26-303-01 - Authorizes the installation of 2-66" CMP culverts with risers through the earthen plug in the L-1 Borrow Canal at northeast

corner of section 10.

26-00013-S 26-303-01 - Authorizes installation of an 18,000 gpm pump

discharging into the L-1 Borrow Canal.

26-00013-W 26-303-01 - Authorizes an annual allocation of 19,300 ac-ft of

groundwater from the Tamiami formation.

26-00069-W 26-303-03 - Authorizes an annual allocation of 354 million gallons

of groundwater from the shallow aguifer.

26-00633-P 26-303-01 - Authorizes the installation of a barbed wire fence on a

portion of the eastern property boundary.

Surface Water Management System:

The northern half of Basin 26-303-01 drains primarily to the L-1 Canal through 3 open connections along the northern boundary of the property. A small portion of the property drains west to a canal with a culvert with risers that direct the flow north to the G-135 structure for discharge mainly to the 298 Flaghole Drainage District. southern portion of the basin can be partially drained through a pair of 48" culverts, one installed at the southeastern corner and one southwestern corner. These culverts were installed as part of the Hendry County emergency action in 1982. However the southern portion of the basin is unable to drain, despite the presence of these culverts because the elevation of the land is low when compared with the average stage in the L-2W Canal.

Basin 26-303-03 is largely native. The property has no reservoirs and is described by the property owner as having no off-site discharge.



Best Management Practices (BMP) Plan:

Level I and II (Basin 26-30-01 and 26-303-02):

- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density (1 head/ 2 acres)
- Reduced P in Feed (20% minimum)

Level III (Basin 26-30-01 and 26-303-02):

- Water Detention (1/2 inch)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Restricted Placement of Feed and Water to Reduce "Hot Spots"
- Provide Shade Structures Away from Drainage
- Low Cattle Density (1 head/ 2 acres)
- Reduced P in Feed (20% minimum)

Level IV - (Basin 26-303-01 and 26-303-02):

- Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- No Nutrients Imported Indirectly Through Cattle Feed
- Water Detention (1/2 inch)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Restricted Placement of Feed and Water to Reduce "Hot Spots"
- Provide Shade Structures Away from Drainage
- Low Cattle Density (1 head/ 2 acres)
- Reduced P in Feed (20% minimum)

Level I and II (Basin 26-303-03):

No Direct Discharge

Level III (Basin 26-303-03):

- No Direct Discharge
- Low Cattle Density (1 head / 2 acres)
- Reduced P in Feed (20% minimum)

Level III (Basin 26-303-03):

No Nutrients Imported Indirectly Through Cattle Feed





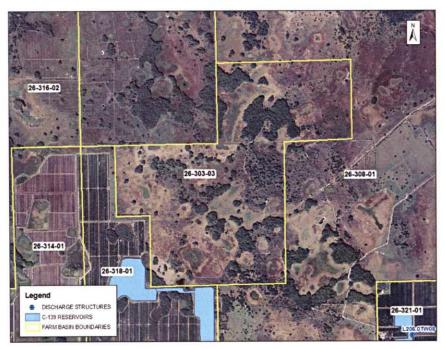
- Particulate Matter and Sediment Controls (2)
- No Direct Discharge (15)
- Water Detention (1/2 inch)
- · Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Restricted Placement of Feed and Water to Reduce "Hot Spots"
- Provide Shade Structures Away from Drainage
- Low Cattle Density (1 head/ 2 acres)
- Reduced P in Feed (20% minimum)

Projected Modifications to the Surface Water Management System:





Aerial of Basin 26-303-01



Aerial of Basin 26-303-03







G-135 at the Northwest corner of the 26-303-01 basin - Looking Southeast



Vegetation growth in the L-1 Canal along the north boundary of the 26-303-01 basin





Constriction in the L-1 Canal along the north boundary of the 26-303-01 basin

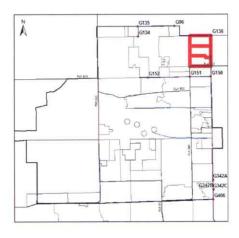


Field ditch drainage for the 26-303-01 basin



A-12





C-139 Everglades WOD Permit Number: 26-00304-E

Jackman Cane & Cattle Company

Area:

Basin 26-304-01

1,274 acres 1.276 acres

Basin 26-304-02

Basin 26-304-03

1.252 acres

Land-use:

Pasture (26-304-2, 26-304-3) and Sugarcane (26-304-1, 26-304-2)

Related Permits:

26-00115-S	Authorizes	construction	and	operation	of	a	water

management system serving 11,500 acres of agricultural lands utilizing the following pumps, 3-18,000 GPM, 3-22,000

GPM and 2-32,000 GPM.

Construction of 27.8 acres of internal and perimeter dikes 26-00115-S-02

and canals resulting in two separate systems being formed from the original 11,500 acre project. This system (Ranch B) will serve 5,120 acres of agricultural lands discharging into

the L-1 Canal.

26-00115-W Authorizes an annual allocation of 7,670 ac-ft of groundwater

from the shallow aguifer. (Applicable for Basins 26-304-01,

26-304-02 and 26-309-01)

Surface Water Management System:

The original permit (26-00115-S) described a surface water management permit for one property that encompassed Basins 26-304-01, 26-304-02, 26-304-03, 26-309-01, 26-322-01, 26-322-02 and 26-322-03. In 1983, the original permit was modified to eliminate and relocate pumps while keeping the same total discharge capacity of 184,000 GPM. In 1990, the existing site was split into two separate permits 26-00115-S-01 (Ranch A) and 26-00115-S-02 (Ranch B). Basins 26-304-01, 26-304-02 and 26-304-03 are within Ranch B.

There are three distinct farm basins in the Jackman Cane and Cattle property. Basin 26-304-01 contains a 154-acre reservoir in the northeast corner of the property. The outfall for this reservoir utilizes a 2.5' wide sharp crested weir with the crest at 14.5' NGVD. Basin 26-304-02 utilizes a surface water management system with internal





canals that are pumped into an internal pond and then discharged via pump to the L-1 canal. Basin 26-304-03 drains north via sheet-flow and drainage canals to a single canal that runs along the northern perimeter of the farm basin. This canal discharges to the L-1 canal through a culvert.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-304-03):

- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)
- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application

Level III (Basin 26-304-03):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- Particulate Matter and Sediment Controls (5)

Level IV (Basin 26-304-03):

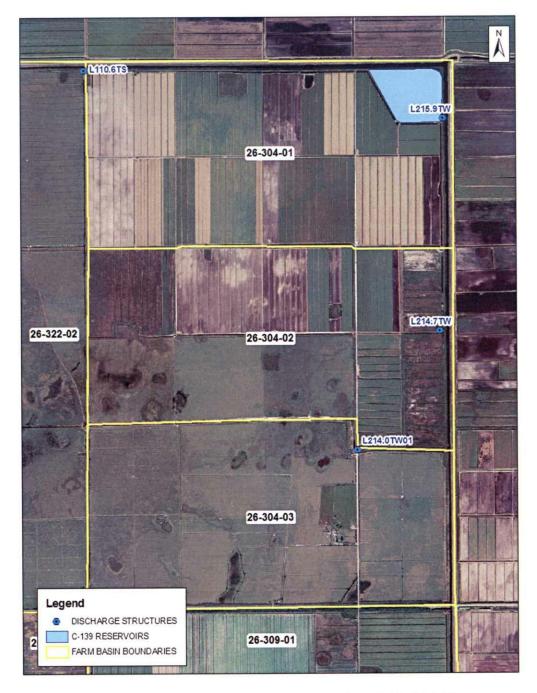
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Level V (Basin 26-304-03):

Restricted Cattle through Fencing of Canals

Projected Modifications to the Surface Water Management System:





Aerial of Basins 26-304-01, 26-304-02 and 26-304-03





L-1 Canal (left) and north boundary canal (right) for Jackman Cane and Cattle – Looking northeast, west of the G-136 structure



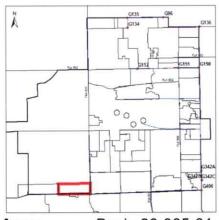
G-136 structure - Looking west at northeast corner of Jackman Cane and Cattle





L-1 Borrow Canal – Looking south with the northeast Jackman Cane and Cattle reservoir on the right





C-139 Everglades WOD Permit Number: **26-00305-E**

Collier Enterprises, Ltd.

Area:

Basin 26-305-01

1,946 acres

Land-use:

Vegetable (1,024 ac), Pasture (36 ac), Reservoirs (365 ac) and

Other: Roadway/Ditches/Swales/Native (521 ac)

Related Permits:

26-00300-W Authorizes an annual allocation of 1,694 million gallons of groundwater from the Lower Tamiami aquifer.

26-00440-S Authorizes the construction and operation of a surface water management system including an 88.5-acre above-ground impoundment (east reservoir).

26-00732-P Authorizes the construction and operation of a surface water management system including a 232-acre above-ground impoundment (west reservoir).

Surface Water Management System:

The property is divided by the White Farm canal that runs north-south into the Deer Fence canal. Each side utilizes a surface water management system with a reservoir. The east reservoir is 88.5 acres and discharges into the White Farm canal via a 2.5' diameter drop-inlet with a control elevation of 25' NGVD. The west reservoir is 276.5 acres and discharges to the Deer Fence canal after sheet-flowing across a small acreage of native land.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-305-01):

- No Nutrients Imported via Direct Land Application
- Approved and Operational Surface Water Reservoir

Level III (Basin 26-305-01):

No Nutrients Imported via Direct Land Application





Approved and Operational Surface Water Reservoir

Level IV (Basin 26-305-01):

- No Nutrients Imported via Direct Land Application
- Particulate Matter and Sediment Controls (2)
- · Approved and Operational Surface Water Reservoir
- · Restricted Placement of Feeders
- Low Cattle Density
- Restrict Cattle Through Fencing of Canals

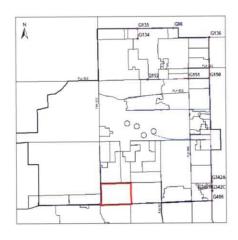
Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-305-01







C-139 Everglades WOD Permit Number: **26-00306-E**

Southern Gardens Groves Corporation

Area:

Basin 26-306-01

3,974 acres

Land-use:

Citrus (3,974 ac)

Related Permits:

26-00073-W Authorizes an annual allocation of 1,265 million gallons of groundwater from the Lower Tamiami aquifer

26-00299-S Authorizes of a surface water management system discharging into

the Deer Fence Canal.

Surface Water Management System:

The entire property is in citrus production. The surface water management system consists of a system of field ditches and canals that are pumped into 3 reservoirs. Pond 1 is in the northeast corner of the property and is 18 acres in size and discharges to Pond 2. Pond 2 is 120 acres in size and discharges into Pond 3. Pond 3 is 232 acres and discharges to the Deer Fence canal at the southwest corner of Pond 3 via a 3.5' wide weir with a crest elevation at 25.0' NGVD.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-306-01):

Approved & Operational Surface Water Reservoir (6.3)

Level III (Basin 26-306-01):

- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Level IV (Basin 26-306-01):

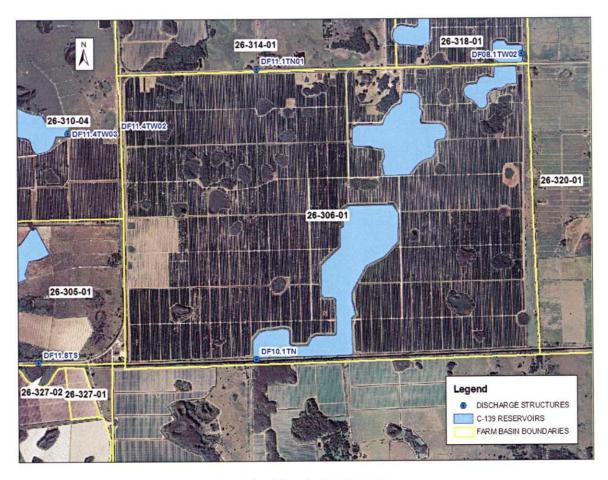
Approved & Operational Surface Water Reservoir (5.2.1)





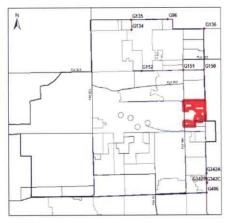
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-306-01





C-139 Everglades WOD Permit Number: **26-00307-E**

United States Sugar Corporation

Area: Basin 26-307-01

Basin 26-307-02 1,351 acres Basin 26-307-03 1,257 acres

Land-use: Pasture (270 ac) and Sugarcane (1,450 ac)

Related Permits:

26-00535-S Authorizes the construction of a surface water management system

270 acres

for the 2,608 acre sugarcane operation within a 2,878 acre leased

site that discharges to the L-2 canal.

26-00012-W Authorizes an annual allocation of 2,963 million gallons of

groundwater from the Lower Tamiami aquifer

10169 Authorizes the installation of a 24" culvert, a 36" culvert and one

3,000 gpm irrigation pump within the L-2 canal west right-of-way.

Surface Water Management System:

Within permit 26-00535-S the Mills West farm is divided into 7 fields (A, B, C, D, E, F and H). These fields are aggregated into 3 drainage basins that discharge to the L-2 canal. Basin 36-307-01 includes field H which is a 270 acre improved pasture which discharges directly to the L-2 canal via a gravity structure. Basin 26-307-02 includes fields A, B, D and E which have a total acreage of 920 acres and discharges through an internal canal system and an 18,000 GPM outfall pump to the L-2 canal. The chosen WOD BMP plan for the basin specifies that discharge should occur after the first 1 inch of runoff has been allowed to attenuate in the ditches and swales. Basin 26-307-03 includes fields C and F which have a total acreage of 530 acres and are pumped into an 1158 acre detention area which discharges via gravity to the L-2 canal. The outfall structure is a 1.8' wide weir with the crest elevation set to 20.0' NGVD with a 1.8' by 0.75' rectangular bleeder orifice at 17.0' NGVD. This structure is at the downstream end of discharge ditches from detention basin structures 3 and 4 which maintain a control elevation of 18.0' NGVD in the reservoir. All discharges are permitted (26-00535-S) to be limited to 0.46" per day.



Best Management Practices (BMP) Plan:

Level I and II (Basin 26-307-01):

No Nutrients Imported via Direct Land Application

Level III (Basin 26-307-01):

- No Nutrients Imported via Direct Land Application
- No Nutrients Imported Indirectly Through Cattle Feed

Level IV (Basin 26-307-01):

- · No Nutrients Imported via Direct Land Application
- No Nutrients Imported Indirectly Through Cattle Feed
- Restricted Placements of Feeders to Reduce "Hot Spots"
- Restricted Placement of Feed and Water to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)
- Reduced P in Feed (20% minimum)

Level I and II (Basin 26-307-02):

- Soil Testing
- Water Detention (1 inch)

Level III (Basin 26-307-02):

- · Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- Water Detention (1 inch)

Level IV (Basin 26-307-02):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- Particulate Matter and Sediment Controls (6)
- Water Detention (1 inch)

Level I, II, III, and IV (Basin 26-307-03):

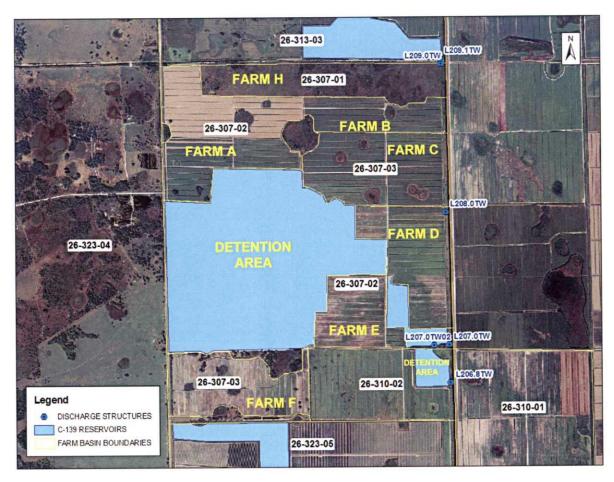
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)





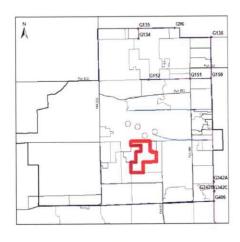
Approved & Operational Surface Water Reservoir (6.3)

Projected Modifications to the Surface Water Management System:



Aerial of Basins 26-307-01, 26-307-02 and 26-307-03





C-139 Everglades WOD Permit Number: **26-00308-E**

Myrick and Rou Farms

Area: Basin 26-308-01 2,880 acres

Land-use: Pasture (2,880 ac)

Related Permits:

26-00385-S Authorizes a surface water management system discharging via Devil's Garden Water Control District Canals into the L-2 canal.

26-00385-W Authorizes an annual allocation of 678 million gallons of groundwater from the Lower Tamiami aquifer.

26-00655-W Authorizes an annual allocation of 1,728 million gallons of groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

The Myrick and Rou Farm permitted a surface water management plan for the construction of approximately 440 acres of reservoirs in December of 2000. The permit expires in December 2005 and none of the construction had been initiated at the time this report was produced. The current state of the property is largely pasture land that drains via field laterals to a main internal canal that traverses the property in a northeasterly fashion to the edge of the Seminole Tracks property. The canal then crosses the Seminole Tracks property and joins the ALICO South Boundary Canal. This canal discharges to the L-2 canal.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-308-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- No Nutrients Imported via Direct Land Application
- Particulate Matter and Sediment Controls (4)
- Approved and Operational Surface Water Reservoir (6.3)





Level III (Basin 26-308-01):

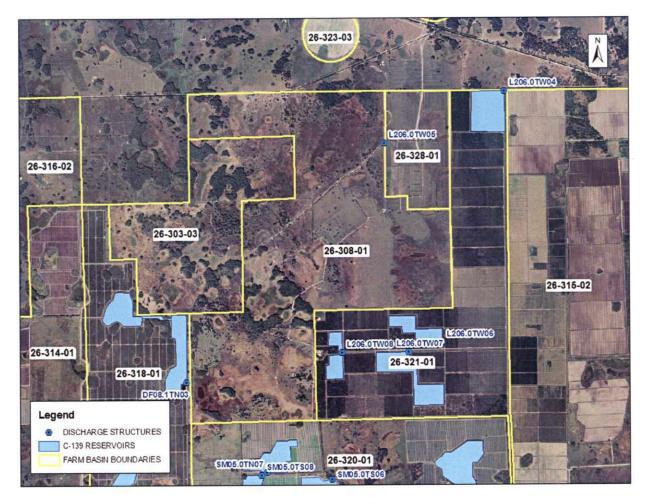
- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- · Reduce P Fertilization
- Particulate Matter and Sediment Controls (4)
- Approved and Operational Surface Water Reservoir (6.2)
- Approved and Operational Surface Water Reservoir (6.3)
- Low Cattle Density (1 head / 2 acres)

Level IV (Basin 26-308-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- Particulate Matter and Sediment Controls (6)
- Approved and Operational Surface Water Reservoir (5.2.1)
- Approved and Operational Surface Water Reservoir (6.2)
- Approved and Operational Surface Water Reservoir (6.3)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

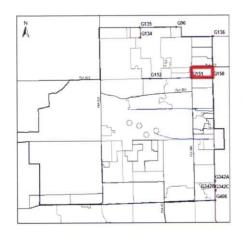
Projected Modifications to the Surface Water Management System:





Aerial of Basin 26-308-01





C-139 Everglades WOD Permit Number: **26-00309-E**

United States Sugar Corporation

Area: Basin 26-309-01 1,255 acres

Land-use: Sugarcane (1098 ac)

Related Permits:

26-00115-S	Authorizes construction and operation of a water				
	management system serving 11,500 acres of agricultural				
	lands utilizing the following pumps, 3-18,000 GPM, 3-22,000				
	GPM and 2-32,000 GPM.				
26-00115-S-02	Construction of 27.8 acres of internal and perimeter dikes				
	and canals resulting in two separate systems being formed				
	from the original 11,500 acre project. This system (Ranch B)				
	will serve 5,120 acres of agricultural lands discharging into				
	the L-1 Canal.				
26-00115-W	Authorizes an annual allocation of 7,670 ac-ft of groundwater				
	from the shallow aquifer. (Applicable for Basins 26-304-1,				
	26-304-2 and 26-309-1)				

Surface Water Management System:

Basin 26-309-01 is a part of Ranch B defined by the 26-00115-S-02 permit. This parcel contains a permitted (26-00115-S-02) surface water management system that includes a network of internal canals and ditches and utilizes a 156.2 acre reservoir that discharges via 1.5' wide weir with a crest at 16.5' NGVD into the L-1 canal north of the G-150 structure.

Best Management Practices (BMP) Plan:

Level I, II, III, and IV (Basin 26-309-01):

- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)



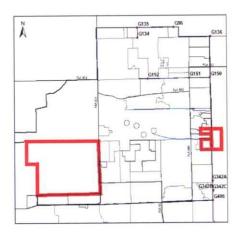


Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-309-01
G-150 Tailwater – Looking south from southeast corner of USSC Jackman with the L-2W Canal on the right





C-139 Everglades WOD Permit Number: **26-00310-E**

Hilliard Brothers of Florida, Ltd.

Area:	Basin 26-310-01 Basin 26-310-02 Basin 26-310-03 Basin 26-310-04	1,198 acres 365 acres 645 acres 21,098 acres	
Land-use:	Basin 26-310-01 Basin 26-310-02 Basin 26-310-03 Basin 26-310-04 Basin 26-310-04	Sugarcane Sugarcane, Wetlands, Reservoirs Sugarcane, Wetlands, Reservoirs Citrus Vegetable Pasture/Wildlife Management	1,198 ac 365 ac 645 ac 558 ac 351 ac 17,677 ac

Related Permits:

- 26-00002-W (26-310-01, 26-310-02, 26-310-03) Authorizes an annual allocation of 1,215 million gallons of groundwater from the Lower Tamiami aquifer.
- 26-00004-W (26-310-01) Authorizes an annual allocation of 1,469 million gallons of groundwater from the Lower Tamiami aquifer.
- 26-00020-W (26-310-04) Authorizes an annual allocation of 8,860 million gallons of groundwater from the Lower Tamiami aquifer and surface water from an on-site retention system and the White Farm Canal.
- 26-00434-S (26-310-04) Authorizes a surface water management system serving 822 acres of agricultural lands discharging to the White Farm Canal and Deer Fence Canal.
- 26-00557-S (26-310-01) Authorizes a surface water management system discharging to the L-2 canal.
- 26-00563-S (26-310-01, 26-310-02, 26-310-03) Authorizes a surface water management system discharging to the L-2 canal.

Surface Water Management System:

Basin 26-310-01 is drained by a network of field ditches and a 24,000 GPM pump that discharges to the L-2 canal. The selected WOD BMP states that the pump is turned on after the first inch of runoff has been attenuated by the internal field canals. As such the





recommended on/off elevation for the pump is 15.2'/14.0' NGVD. Basin 26-310-03 has the same type of surface water management system as Basin 26-310-01 with the exception that the on/off elevation for the pump is 15.0'/14.0' NGVD. Basin 26-310-02 has a 35 acre reservoir that discharges to the L-2 Canal via a 1.5' wide weir with a crest elevation at 22.0' NGVD and a 1.5' by 0.5' rectangular bleeder orifice with invert elevation at 18.0' NGVD.

Basin 26-310-04 has been purchased by the Trustees of the Internal Improvement Trust Fund (TIITF) which has arranged for a management lease to the Florida Fish and Wildlife Commission (FWCC) to be used as wildlife habitat and panther preserve. Currently, portions of the property are being sub-leased to farmers for uses including sugarcane, citrus, vegetable, and pasture.

The sugarcane field currently discharges north to the pasture land. The pasture drains south through the White Farm canal and east to the north extension of the Deer Fence canal along CR 833. The vegetable farm drainage is currently pumped north and east into the pasture land. The citrus operation contains a reservoir that can discharge via riser structures either east to the north extension of the Deer Fence canal or west to the White Farm Canal, however visual inspection shows that the eastern outfall has a very high invert elevation and the reservoirs are very dry during the wet season.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-310-01/03):

- Soil Testing
- Water Detention (1 inch)

Level III (Basin 26-310-01/03):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- Water Detention (1 inch)

Level IV (Basin 26-310-01/03):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- Particulate Matter and Sediment Controls (6)
- Water Detention (1 inch)

Level I, II, III and IV (Basin 26-310-02):





- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Level I and II (Basin 26-310-04):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (4)
- Approved & Operational Surface Water Reservoir (6.3)
- Low Cattle Density (1 head / 2 acres)

Level III (Basin 26-310-04):

- · Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- Particulate Matter and Sediment Controls (8)
- Approved and Operational Surface Water Reservoir (6.2)
- Approved and Operational Surface Water Reservoir (6.3)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

Level IV (Basin 26-310-04):

- Nutrient Application Control
- · Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- Particulate Matter and Sediment Controls (6)
- Particulate Matter and Sediment Controls (8)
- Improvements to Water Management System Infrastructure to Further Increase Water Quality Treatment
- · Reduced Flow Through Water Table Management
- Approved and Operational Surface Water Reservoir (5.2.1)
- Approved and Operational Surface Water Reservoir (6.2)
- Approved and Operational Surface Water Reservoir (6.3)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)



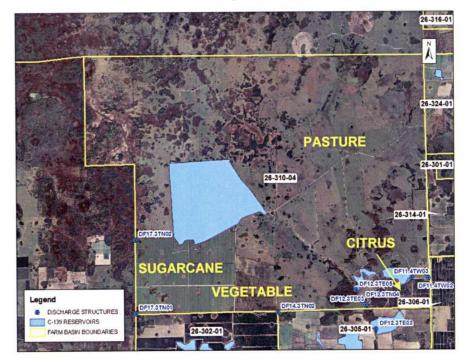


Projected Modifications to the Surface Water Management System:

The FWS plans to take agricultural lands out of production in phases coordinated with the end of the farmer's leases and the harvest of crops, such as sugarcane.



Aerial of Basins 26-310-01, 26-310-02 and 26-310-03



Aerial of Basin 26-310-04







Breach at intersection of ALICO Canal and L-2 Canal – Looking northwest between Basin 26-323-05 (upper right) and Basin 26-310-03 (upper left) and Basin 26-310-01 (lower right)



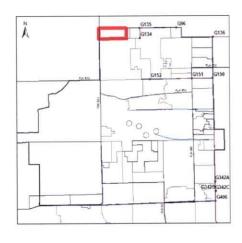
Cypress domes within unimproved pasture in Basin 26-310-03





Wetlands within Basin 26-310-04





C-139 Everglades WOD Permit Number: 26-00312-E

Farmland Reserve, Inc.

Area:

Basin 26-312-01

1,674 acres

Land-use: Citrus (1,674 ac)

Related Permits:

26-00318-S Authorizes a surface water management system that discharges into the Hegman Borrow Canal.

26-00318-W Authorizes an annual allocation of 322 million gallons of groundwater and surface water from the Sandstone aquifer and on site retention areas.

Surface Water Management System:

The Deseret Farms property utilizes a surface water management system that includes internal canals and 3 connected reservoirs totaling 251 acres in size. The system discharges via a 2.0' wide weir with a V-notch bleeder. The invert of the bleeder is 21.8' NGVD and the weir crest elevation is 22.3' NGVD. This outfall discharges to the Hegeman canal, which joins the L-1 canal at the G-135 structure.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-312-01):

- Plant Tissue Analysis (Citrus Only)
- Soil Testing
- Split Nutrient Application

Level III (Basin 26-312-01):

- Nutrient Spill Prevention
- Plant Tissue Analysis (Citrus Only)
- Soil Testing





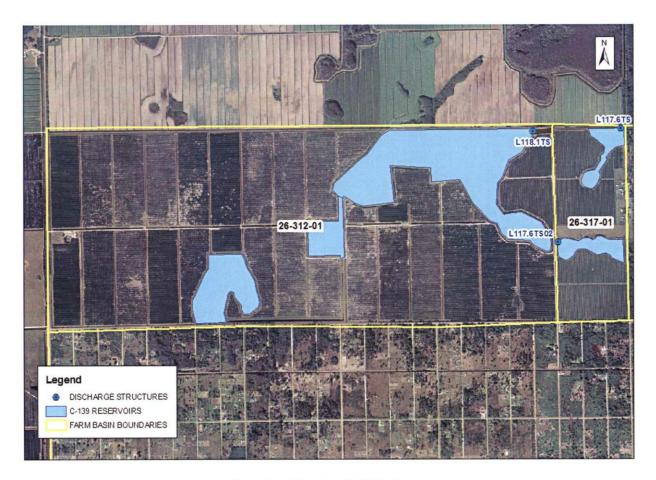
- Split Nutrient Application
- Particulate Matter and Sediment Controls (2)
- Water Detention (1/2 inch)

Level IV (Basin 26-312-01):

- Nutrient Spill Prevention
- Plant Tissue Analysis (Citrus Only)
- Soil Testing
- Split Nutrient Application
- Particulate Matter and Sediment Controls (2)
- Approved and Operational Surface Water Reservoir (5.2.1)
- Approved and Operational Surface Water Reservoir (6.2)
- Approved and Operational Surface Water Reservoir (6.3)

Projected Modifications to the Surface Water Management System:





Aerial of Basin 26-312-01





Deseret Farms Southwest Reservoir - Looking south towards Montura Ranch



Deseret Farms Cenral Reservoir - Looking North



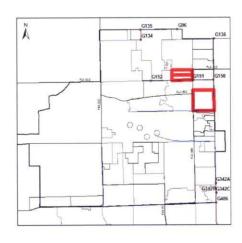


Deseret Farms Northeast Reservoir (Southern Lobe) - Looking northwest



Deseret Farms Northeast Reservoir (Outfall)- Looking north





C-139 Everglades WOD Permit Number:

26-00313-E

J&J Ag Products, Inc.

Area:	Basin 26-313-01	644 acres
	Basin 26-313-02	644 acres
	Basin 26-313-03	2.574 acres

Land-use:	Basin 26-313-01	Improved Pasture	644 ac
	Basin 26-313-02	Sugarcane and Vegetables	644 ac
	Basin 26-313-03	Sugarcane and Vegetables	1,287 ac
	Rasin 26-313-03	Semi-improved Pasture and Havs	1 287 ac

Related Permits:

26-00068-P	(26-313-03) Authorizes a surface water management system that	
	discharges from the southeast corner of the property (Weir crest =	
	17.0 ft NGVD) into the L-2 canal via the Alico Canal.	
26-00068-W	(26-313-03) Authorizes an annual allocation of 2,560 million gallons	
	of groundwater from the Lower Tamiami aquifer.	
26-00368-S	(26-313-02) Authorizes a surface water management system that	

discharges to the L-2W canal via a tail water ditch 26-00368-W (26-313-02) Authorizes an annual allocation of 210 million gallons of groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

Runoff is sheet-flowing through Basin 26-313-01. There is a perimeter canal from the northwest corner of the property to the southeast corner. The southeast corner of the basin is leveled as pasture. Basin 26-313-02 utilizes a multipart surface water management system. Within Basin 26-313-02 groundwater is pumped into an irrigation canal that runs east through the center of the property. Any water that is not used for irrigation drains along the east boundary and then is pumped west along the south boundary of the property to the reservoir at the western end. The surface water management system allows the water not released to the 150-acre reservoir to be recirculated into the irrigation canal. The reservoir has a control elevation of 19.0' NGVD maintained by two control structures on the south and north. The southern structure is a 2.0' wide weir with a 50 degree notch bleeder and a 6" diameter orifice. The northern structure is a 2.5' wide weir with a 6" diameter orifice. Discharges from the reservoir are made to a tail water ditch that runs along the south boundary of the property and into the L-2W canal through a pipe just upstream of the G-151 structure.



Basin 26-313-03 has a road bisecting the property from west to east. The land-use north of the internal road is vegetable and sugar cane. The surface water is drained via internal drainage ditches and pumped across the road into a pasture on the southern half of the farm. In addition, there is a northern perimeter ditch that flows south via the east perimeter ditch of the farm to the perimeter ditch of the reservoir. The southern half of the farm is used to grow hay and as a pasture. All of the southern farm sheet-flows into the perimeter canal of a 125-acre reservoir in the southeast corner of the property. Pumps put water into the reservoir from the perimeter canal and the reservoir discharges to the ALICO Midway canal via a culvert that has a flash-board riser structure on the downstream end. The control elevation of the reservoir is set at 17.0' NGVD.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-313-01):

No Nutrients Imported Indirectly Through Cattle Feed

Level III (Basin 26-313-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- No Nutrients Imported Indirectly Through Cattle Feed
- Particulate Matter and Sediment Controls (2)
- Restricted Placement of Feeders to Reduce "Hot Spots"

Level IV (Basin 26-313-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- No Nutrients Imported Indirectly Through Cattle Feed
- Particulate Matter and Sediment Controls (2)
- Water Detention (1/2 inch)
- Restricted Placement of Feed and Water to Reduce "Hot Spots"

Level I, II, III and IV (Basin 26-313-02 and 26-313-03):

- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

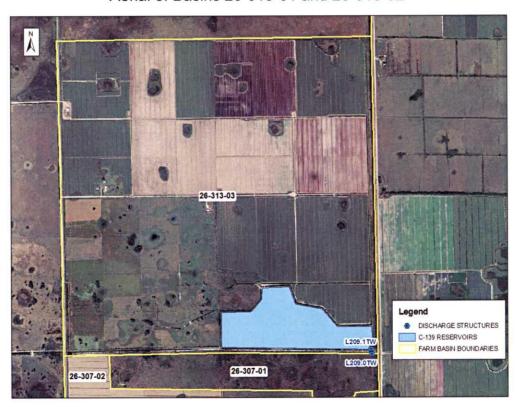
Projected Modifications to the Surface Water Management System:







Aerial of Basins 26-313-01 and 26-313-02



Aerial of Basin 26-313-03

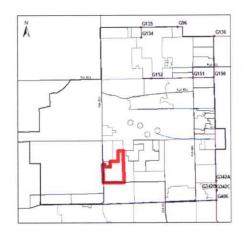






L-2W Canal Looking South – Southwest corner of the Basin 26-313-02 reservoir (lower left) and Southeast corner of Basin 26-322-03 (lower right)





C-139 Everglades WOD Permit Number: **26-00314-E**

Crooks Ranch, Inc.

Area:

Basin 26-314-01

2,662 acres

Land-use:

Pasture and Native (1,862 ac) and Vegetables (800 ac)

Related Permits:

26-00679-P Authorizes a surface water management system which includes 560 acres of detention area.

26-00368-W Authorizes an annual allocation of 132 million gallons of groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

Water pumped from the wells for irrigation of the vegetable farm goes into an internal canal system and is re-circulated using internal pumps to the northern end of the farm. All other runoff is transported by sheet-flow to the east pasture and then discharges to the south east swale/canal where it crosses CR 833. After crossing CR 833, the discharge canal travels west and south along the perimeter of Basin 26-306-01 before reaching the Deer Fence Canal.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-314-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (4)

Level III (Basin 26-314-01):

- Nutrient Application Control
- · Nutrient Spill Prevention





- Soil Testing
- Reduce P Fertilization
- Particulate Matter and Sediment Controls (4)
- Particulate Matter and Sediment Controls (6)
- Improvements to Water Management System Infrastructure to Further Increase Water Quality Treatment
- Low Cattle Density (1 head / 2 acres)

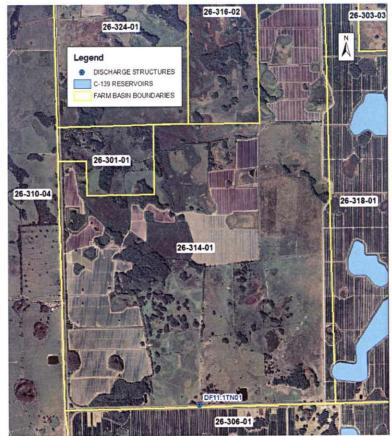
Level IV (Basin 26-314-01):

- · Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- Particulate Matter and Sediment Controls (6)
- Particulate Matter and Sediment Controls (8)
- Improvements to Water Management System Infrastructure to Further Increase Water Quality Treatment
- Reduced Flow Through Water Table Management
- · Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Feed and Water to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

Projected Modifications to the Surface Water Management System:

Basin 26-314-01 maintains a permit to construct a surface water management system to serve 1,928 acres of the 2,677 acre agricultural development known as Crooks Ranch for 687 acres of irrigated farm area, 559.2 acres of detention area, and 681.8 acres of non-irrigated farm area and conceptual approval of 249.4 acres of future agricultural development with discharge to the C-139 Basin via CR 833 via on-site canals and ditches. This permit was issued on November 10th, 2004.



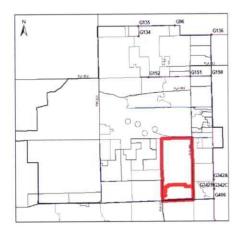


Aerial of Basin 26-314-01



Looking southwest from Basin 26-314-01 at Basin 26-306-01 along the main drainage canal that crosses CR 833 and follows north and western perimeter of the property discharging into the Deer Fence Canal





C-139 Everglades WOD Permit Number: **26-00315-E**

Zipperer Farms, L.L.C.

Area: Basin 26-315-01

2,384 acres

Basin 26-315-02

8,981 acres

Land-use:

Vegetables (5,100 ac), Pasture (2,100 ac), Citrus (1,525 ac),

Flowers (1,600 ac), Detention Area (150 ac) and Undeveloped (890 ac)

Related Permits:

26-00143-S Authorizes a surface water management system discharging via a perimeter canal to the S&M canal.

26-00143-W Authorizes an annual allocation of 4,985 million gallons of groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

The property is primarily in row crop production with a well-defined internal water conveyance system, including field ditches, lateral canals, main canals, and internal water control structures. The pasture and native areas have sheetflow generally southward or to nearby canals. There are two unique hydrologic systems present on the farm. One system contains 2,384 acres in the southernmost portion of the property that directs runoff through a surface water reservoir. This reservoir is controlled by Structure J-5 and ultimately discharges to the L-2 canal via the S&M canal through two pairs of 72" riser culverts. The other system contains 8,981 acres. The majority of this runoff is directed to a surface water reservoir which discharges into the surface water reservoir at the southern end of the property. There are also other discharges from pasture and vegetable directly to the east-boundary canal.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-315-01):

Design Storm





Level III (Basin 26-315-01):

- Design Storm
- Discharge Rate

Level IV (Basin 26-315-01):

- Design Storm
- Discharge Rate
- Treatment Volume

Level I and II (Basin 26-315-02):

• Water Detention (1-1/2 inch)

Level III (Basin 26-315-02):

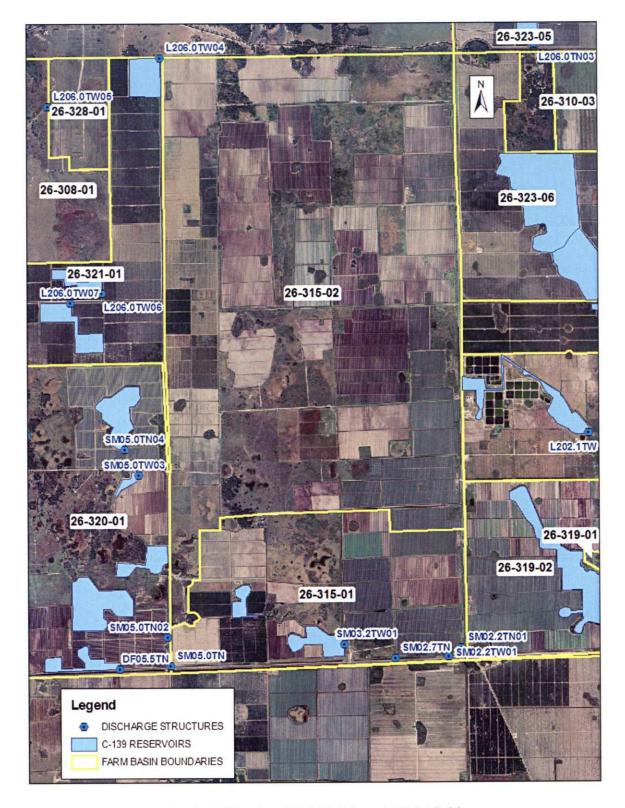
- Water Detention (1-1/2 inch)
- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing

Level IV (Basin 26-315-02):

- Water Detention (1-1/2 inch)
- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Canal Cleaning
- Water Table Management
- Plant Tissue Analysis
- Split Nutrient Application
- · No Nutrients Imported
- Low Cattle Density

Projected Modifications to the Surface Water Management System:

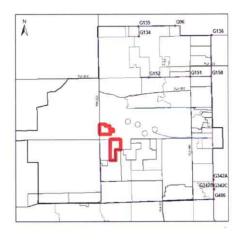




Aerial of Basins 26-315-01 and 26-315-02







C-139 Everglades WOD Permit Number:

26-00316-E

Ray C Hull Ranch, Inc.

Area:

Basin 26-316-01

688 acres

Basin 26-316-02

960 acres

Land-use:

Pasture (1,648 ac)

Related Permits:

There are no related storm-water or water-use permits for the Ray C Hull Ranch.

Surface Water Management System:

Basin 26-316-01 is mostly semi-improved pasture land with the eastern third a native slough that drains to the southeast. Basin 26-316-02 is largely native and includes a significant portion of the same slough that is within the North farm. The properties have no off-site point discharge.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-316-01/02):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (4)

Level III (Basin 26-316-01/02):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- Particulate Matter and Sediment Controls (4)
- Low Cattle Density (1 head / 2 acres)

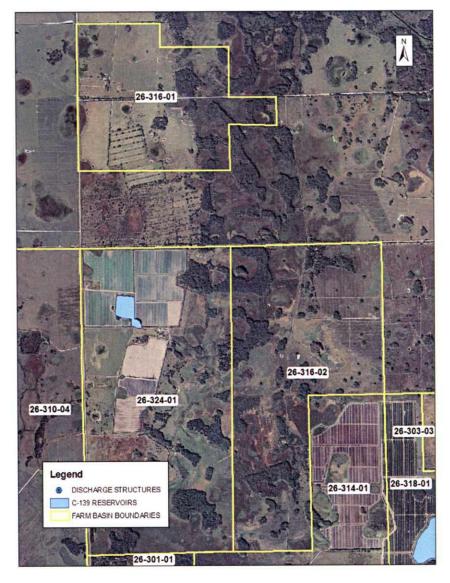




Level IV (Basin 26-315-01):

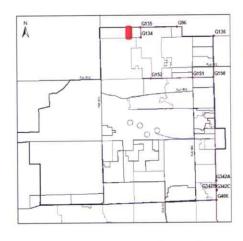
- · Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- Particulate Matter and Sediment Controls (6)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Feed and Water to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

Projected Modifications to the Surface Water Management System:



Aerial of Basins 26-316-01 and 26-316-02





C-139 Everglades WOD Permit Number: **26-00317-E**

Cotton Brothers

Area:

Basin 26-317-01

240 acres

Land-use:

Pasture (24 ac) and Citrus (216 ac)

Related Permits:

26-00383-S Authorizes a surface water management system discharging into Hegeman Canal.

26-00383-W Authorizes an annual allocation of 104 million gallons of groundwater from the surficial aquifer and on-site detention ponds.

Surface Water Management System:

The farm has two separate surface water management systems which discharge to the Hegeman canal. The south reservoir is 18 acres in size and discharges through a 6" diameter orifice with an invert of 21.5' NGVD. The north reservoir is 16 acres in size and discharges through a 6" diameter orifice with an invert of 20.5' NGVD.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-317-01):

Approved & Operational Surface Water Reservoir (6.3)

Level III (Basin 26-317-01):

- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Level IV (Basin 26-317-01):





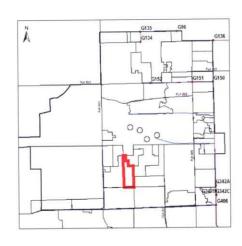
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.3)
- Approved & Operational Surface Water Reservoir (6.2)

Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-317-01





C-139 Everglades WOD Permit Number: 26-00318-E

Southern Gardens Grove Corporation

Area:

Basin 26-318-01

Basin 26-318-02

408 acres

1,141 acres

Land-use: Citrus (1,549 ac)

Related Permits:

26-00282-S Authorizes operation of a surface water management system that discharges into a Deer Fence Canal.

26-00282-W Authorizes an annual allocation of 515 million gallons of groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

Basin 26-318-01 utilizes 2 reservoirs, Ponds 1 and 2. The 46-acre Pond 1 collects the surface water from Grove 1 and discharges it to Grove 2. Based on the permit (26-00282-S), the 59-acre Pond 2 collects the runoff from Grove 2 and discharges to a north-south canal along the eastern property boundary via a 1.0' wide weir with a crest elevation of 27.5'.

Basin 26-318-02 utilizes 3 reservoirs, Ponds 3, 4, and 5. The 33-acre Pond 3 collects the runoff from Grove 3 and discharges to Grove 4. The 54-acre Pond 4 collects the runoff from Groves 4 and discharges to Grove 5. The 16-acre Pond 5 collects the runoff from Grove 5 and discharges to a north-south canal (South Bay Canal) along the eastern property boundary via a 0.98' wide weir with a crest elevation of 26.5' NGVD. The South Bay Canal discharges to the Deer Fence Canal.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-318-01 and 26-318-02):

Approved & Operational Surface Water Reservoir (6.3)

Level III (Basin 26-318-01 and 26-318-02):

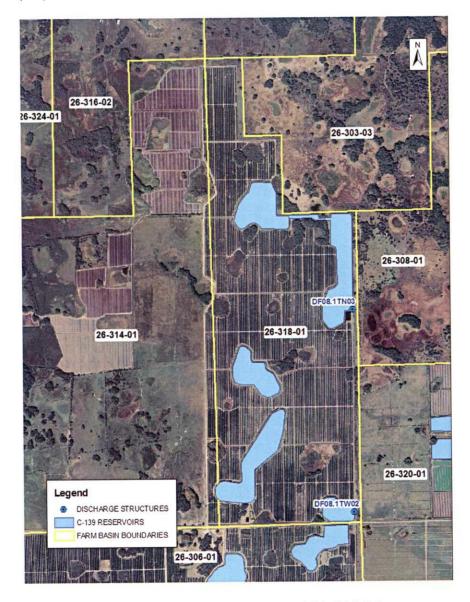


- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Level IV (Basin 26-318-01 and 26-318-02):

- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.3)
- Approved & Operational Surface Water Reservoir (6.2)

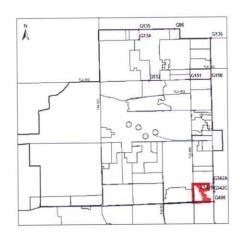
Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-318-01 and 26-318-02







C-139 Everglades WOD Permit Number: 26-00319-E

C&B Farms, Inc.

Area:

Basin 26-319-01

Basin 26-319-02

65 acres

1.658 acres

Land-use: Vegetables (1,378 ac), Detention Area (280 ac) and Native (65 ac)

Related Permits:

26-00303-S Authorizes a surface water management system that discharges into the S&M canal via on-site wetlands.

26-00303-W Authorizes an annual allocation of 2,005 million gallons of groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

In 1999 the three reservoir system that discharges to the S&M canal at the southeast corner of the property was completed. The three reservoirs that are utilized in the surface water management system run from the northwest to the southeast and increase in size successively. The first reservoir is 36.9 acres and discharges to the second reservoir via two 3.5' wide weirs with the crest elevation at 19.5' NGVD. The second reservoir is 50.7 acres and discharges to the third reservoir via two 3.75' wide weirs with the crest elevation at 19.0' NGVD. The third reservoir is 192.8 acres and discharges to the S&M canal thru a single 3.8' wide weir with the crest elevation at 18.0' NGVD via a north-south perimeter ditch.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-319-01 and 26-319-02):

- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.3)
- Approved & Operational Surface Water Reservoir (6.2)
- No Direct Discharge

Level III (Basin 26-318-01 and 26-318-02):



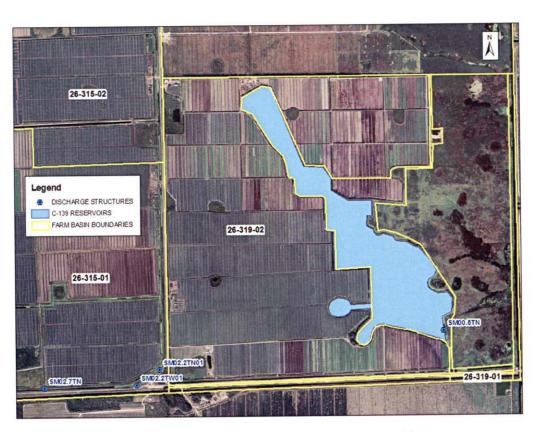
- No Nutrients Imported via Direct Land Application
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.3)
- Approved & Operational Surface Water Reservoir (6.2)
- No Direct Discharge

Level IV (Basin 26-318-01 and 26-318-02):

- No Nutrients Imported via Direct Land Application
- Particulate Matter and Sediment Controls (4)
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.3)
- Approved & Operational Surface Water Reservoir (6.2)
- No Direct Discharge

Projected Modifications to the Surface Water Management System:

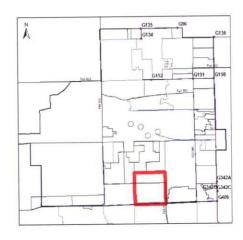
There is a proposal to add two weirs and two pumps to the S&M Canal as part of a tailwater recirculation system in Basin 26-319-01.



Aerial of Basins 26-319-01 and 26-319-02







C-139 Everglades WOD Permit Number: **26-00320-E**

J Seven Ranch, Inc.

Area:

Basin 26-320-01

5,712 acres

Land-use:

Vegetables (1,621 ac), Pasture (3,188 ac) and Reservoirs (903 ac)

Related Permits:

26-00660-W Authorizes an annual allocation of 934,400 gallons of groundwater from the sand stone aquifer.

26-00669-P Authorizes a surface water management system that discharges to the L-3 canal via the S&M canal.

Surface Water Management System:

The J-Seven Ranch has received approval to construct and operate 15 reservoirs on the property. Based on visits to the farm by Everglades WOD staff and conversations with the permittee, 8 of the 15 reservoirs have been constructed. The J-Seven Ranch has the capability of discharging off-site south to the Deer Fence canal, however the property owner has chosen the "No direct discharge" BMP, therefore of the original 6 culverts to the Deer Fence canal 3 have been removed or plugged and the remaining three have been locked closed.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-320-01):

No Direct Discharge

Level III (Basin 26-320-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- No Direct Discharge



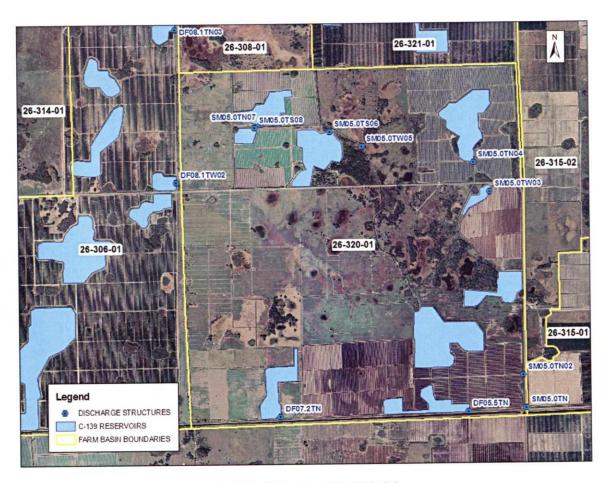


Level IV (Basin 26-320-01):

- Nutrient Application Control
- · Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (6)
- · No Direct Discharge
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Feed and Water to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

Projected Modifications to the Surface Water Management System:

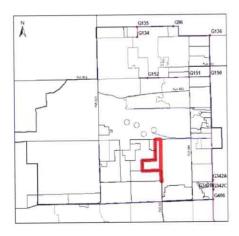
The permitee is in the process of completing construction of all reservoirs as indicated in permit 26-00660-W. Areas not served by a reservoir are to be used as pasture.



Aerial of Basins 26-320-01







C-139 Everglades WOD Permit Number: **26-00321-E**

Sunshine Agriculture, Inc.

Area:

Basin 26-321-01

1.897 acres

Land-use: Citru

Citrus (1,897 ac)

Related Permits:

26-00385-S Authorizes a surface water management system that discharges to

the L-2 canal via the Devil's Garden Water Control District canal

system.

26-00385-W Authorizes an annual allocation of 678 million gallons of

groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

Reservoirs A (31.8-acres), B (76.0-acres), and C (40-acres) all discharge into a single canal that runs east through the center of the lower two sections and turns north along the property boundary. This canal runs north along the property line and joins the Devil's Garden Water Control District canal that runs along the south boundary of the ALICO property. Reservoir D (78.5-acres) discharges directly to the same canal. The discharge structures for both Reservoirs B & D are 0.45' wide weirs with crest elevations at 24.0' NGVD. Both structures include a 0.45' wide 1.0' high triangular bleeder with an invert of 23.5' NGVD. Reservoir A has a discharge structure that is a 1.25' wide semi-circular weir with a crest elevation of 27.0' NGVD. This structure includes a 0.75' diameter orifice with an invert elevation of 23.5' NGVD. The discharge structure for Reservoir C is a 0.25' wide weir with the crest elevation at 24.0' NGVD. There is also a triangular orifice with dimensions of 0.25' wide and 0.5' high with an invert elevation of 23.0' NGVD.

Best Management Practices (BMP) Plan:

Level I, II, III and IV (Basin 26-321-01):

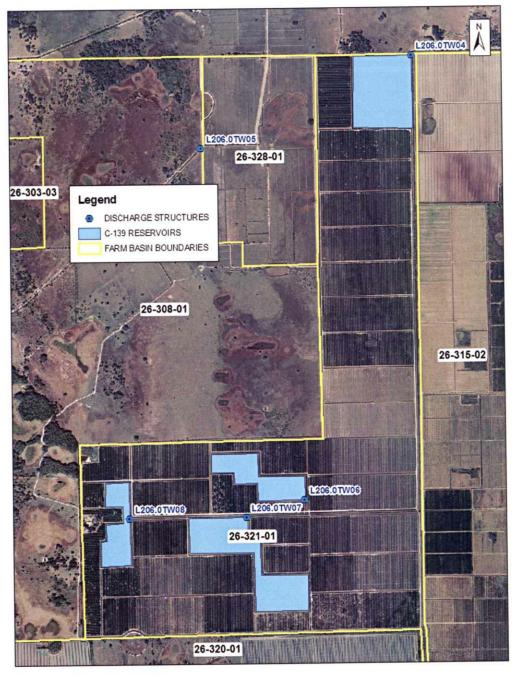
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.3)





Approved & Operational Surface Water Reservoir (6.2)

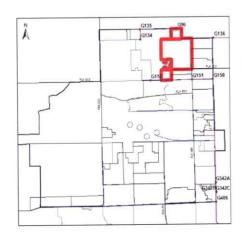
Projected Modifications to the Surface Water Management System:



Aerial of Basins 26-321-01







C-139 Everglades WOD Permit Number: **26-00322-E**

Jackman Cattle, Inc.

Area: Basin 26-322-01

Basin 26-322-02 Basin 26-322-03 628 acres 5,278 acres 645 acres

Land-use: Pasture (6,551 ac)

Related Permits:

26-00115-S	Authorizes construction and operation of a water		
	management system serving 11,500 acres of agricultural lands utilizing the following pumps, 3-18,000 GPM, 3-22,000		
	GPM and 2-32,000 GPM.		
26-00115-S-01	Construction of 30.9 acres of internal and perimeter dike		
	and canals resulting in two separate systems being formed		
	from the original 11,500 acre project. This system (Ranch A)		
	will serve 6,380 acres of agricultural lands discharging into		
	the L-1 Canal.		
26-00115-W	Authorizes an annual allocation of 7,670 ac-ft of groundwater		
	from the shallow aquifer.		
26-00419-W	Authorizes an annual allocation of 6,048 million gallons of		
	groundwater from the Lower Tamiami aquifer.		
	•		

Surface Water Management System:

Basins 26-322-01, 26-322-02 and 26-322-03 are within the Ranch A system. There are no reservoirs on the property. The runoff processes of the property are mainly sheet-flow and field ditches leading to culverts that drain off-site. Basin 26-322-01 is transported by sheet-flow toward the northeast and drains through three culverts into the L-1 canal. Basins 26-322-02 are drained by field ditches that flow into a canal on the eastern boundary of the property. This canal flows into the L-1 canal and through two culverts at the northeast end of section 13. Basin 26-322-03 drains southeast into the L-2W canal through 34" culverts.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-322-01):





No Nutrients Imported Indirectly through Cattle Feed

Level III (Basin 26-322-01):

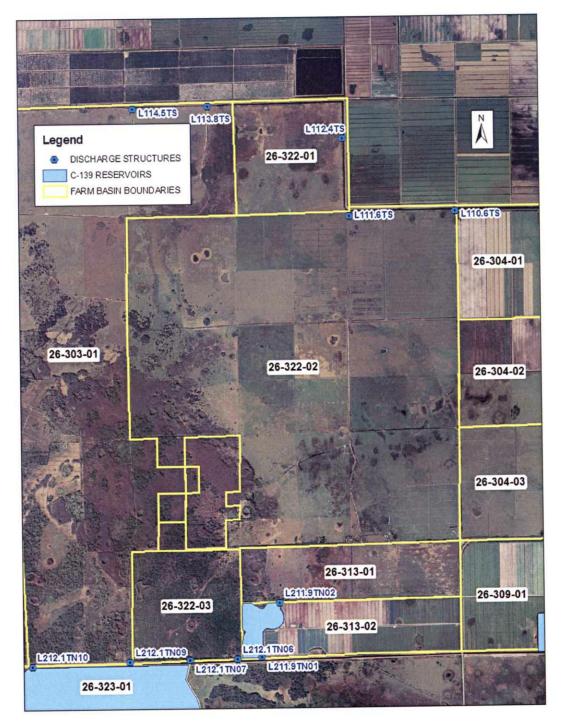
- No Nutrients Imported via Direct Land Application
- No Nutrients Imported Indirectly through Cattle Feed

Level IV (Basin 26-322-01):

- Nutrient Spill Prevention
- No Nutrients Imported via Direct Land Application
- No Nutrients Imported Indirectly through Cattle Feed
- Particulate Matter and Sediment Controls (6)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

Projected Modifications to the Surface Water Management System:





Aerial of Basins 26-322-01, 26-322-02 and 26-322-03

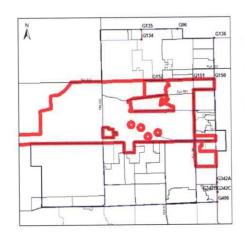




G-96 structure at the northwest corner of the Jackman Cattle property



L-2W Canal Looking North – Outflow structure from Basin 26-322-3 (top) and reservoir for Basin 26-323-1 (bottom)



C-139 Everglades WOD Permit Number: **26-00323-E**

ALICO, Inc.

Area:	Basin 26-323-01	2,340 acres
	Basin 26-323-02	3,540 acres
	Basin 26-323-03	791 acres
	Basin 26-323-04	50,886 acres
	Basin 26-323-05	631 acres
	Basin 26-323-06	2,302 acres

Land-use: Vegetables (6,928 ac), Pasture (50,630 ac) and Citrus (2,933 ac)

Related Permits:

26-00108-S (Basins 26-323-03, 26-323-04) Authorizes an extensive surface water management plan that included 10 reservoirs with a total acreage of 1,496 acres.

26-00108-W (Basins 26-323-03, 26-323-04) Authorizes an annual allocation of 13,619 million gallons of groundwater and surface water from the Lower Tamiami aquifer, on-site detention, and surrounding canals (including the L-2W canal)

26-00304-S (Basins 26-323-02, 26-323-04) Authorizes the construction of the Midway canal.

26-00453-S (Basins 26-323-02, 26-323-03, 26-323-04) Authorizes an extensive surface water management system for Hill Grade Farm. Further permit modification authorizes the construction of 4 center pivot fields.

26-00453-W (Basins 26-323-02, 26-323-03, 26-323-04) Authorizes an annual allocation of 6,003 million gallons of groundwater and surface water from the Lower Tamiami aquifer and on-site detention.

26-00455-S (Basins 26-323-05, 26-323-06) Authorizes a surface water management system for KT Groves North and South.

26-00483-S (Basin 26-323-04) Authorizes a surface water management system for pasture land that discharges via CR 846 to the L-3 canal.

26-00483-W (Basin 26-323-04) Authorizes an annual allocation of 784 million gallons of groundwater and surface water from the Lower Tamiami aquifer and on-site detention.



- 26-00505-W (Basin 26-323-04) Authorizes a daily allocation of 14,285 gallons of groundwater from the Lower Tamiami aquifer for potable water supply.
- 26-00522-S (Basin 26-323-01) Authorizes a surface water management system for North Hill Grade Farm that discharges to L-2W.

Surface Water Management System:

Basin 26-323-01 contains one 755 acre reservoir that discharges directly to the L-2W canal via a 7.0' wide weir with a crest elevation of 23.4' NGVD and five 0.75' diameter orifices with inverts at 20.7' NGVD. There is currently one other 186-acre reservoir in operation north of the Hill Grade Ditch on the west side of North Basin 26-323-01. This reservoir discharges into the Tower Canal and then the North Boundary Canal before reaching the L-2W. One smaller reservoir (48-acres) discharges to the L-2W through the Hill Grade Ditch.

There are 341 acres of detention storage between the three operational reservoirs within Basin 26-323-02 that discharge to the Midway Canal.

Basin 26-323-03, which is an aggregation of 4 farm fields with center-pivot irrigation, contains two operational reservoirs with a total of 117-acres of detention storage adjacent. These reservoirs discharge to the Devil's Garden Canal and leave the property at the south boundary.

The drainage system for Basin 26-323-04 is sheet-flow into large internal canals such as the Midway or Devil's Garden canals.

Basin 26-323-05 is drained by field laterals and an internal canal system from which the surface water is pumped into the reservoir. The north reservoir is 112.6-acres in size and discharges via 2-6' wide weirs with a crest elevation at 21.0'NGVD into the Devil's Garden canal which joins the L-2 Canal at a newly added culvert.

Basin 26-323-06 is drained by field laterals and an internal canal system from which the surface water is pumped into the reservoir. The south reservoir is 527-acres in size and discharges via 2-4' wide weirs with a crest elevation at 22.0' NGVD into the South Boundary canal.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-323-01):

- Nutrient Application Control
- · Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (2)
- Approved & Operational Surface Water Reservoir (6.3)
- Restricted Placement of Feeders to Reduce "Hot Spots"





Low Cattle Density (1 head / 2 acres)

Level III (Basin 26-323-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

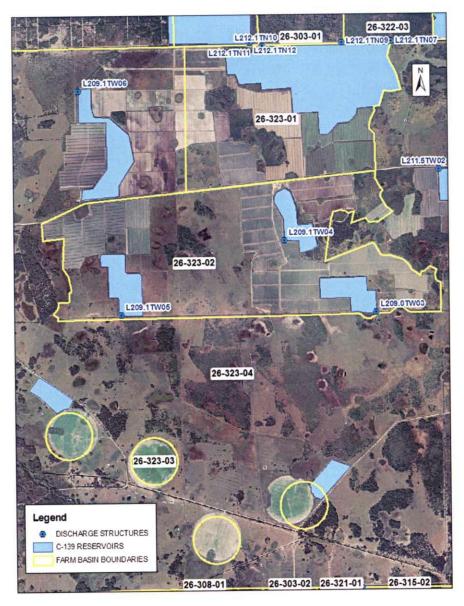
Level IV (Basin 26-322-01):

- Nutrient Application Control
- · Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- Particulate Matter and Sediment Controls (6)
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)
- Restricted Placement of Feeders to Reduce "Hot Spots"
- Restricted Placement of Cowpens to Reduce "Hot Spots"
- Low Cattle Density (1 head / 2 acres)

Projected Modifications to the Surface Water Management System:

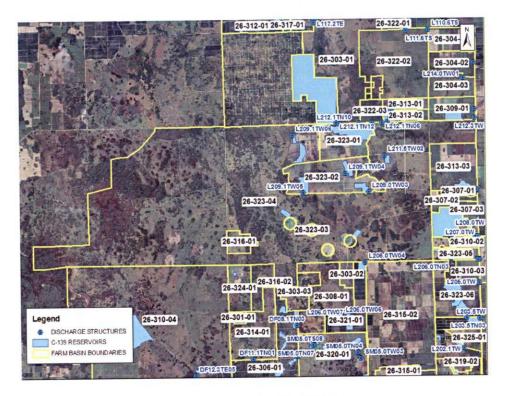
There is presently a permit application on behalf of ALICO Inc for Basins 26-323-01, 26-323-02 and 26-323-04.





Aerial of Basins 26-323-01, 26-323-02 and 26-323-03





Aerial of Basin 26-323-04



Aerial of Basins 26-323-05 and 26-323-06





G-152 Structure – Looking west ALICO Basin 26-323-01 (left) and Central County Drainage District reservoir (right) (NOTE: Ditch between structures was installed by SFWMD to act as a barrier to ALICO Basin 26-323-01)



ALICO Basin 26-323-01 Reservoir – Looking south at ALICO vegetable farming in the distance

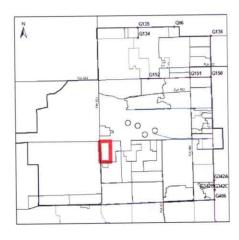




Reservoir for Basin 26-323-05 (ALICO property east of CR 846) Looking North

A-73





C-139 Everglades WOD Permit Number: 26-00324-E

Devil's Garden Golden Ox

Area:

Basin 26-324-01

1,268 acres

Land-use:

Pasture (977 ac) and Vegetables (291 ac)

Related Permits:

26-00768-P Authorizes a surface water management system that discharges to the CR 833 ditch via on-site slough conveyance system.

Surface Water Management System:

The northwest corner of Basin 26-324-01 contains a vegetable farming operation. A permitted reservoir within this quadrant of the farm is currently being used to manage surface water for the vegetable farming operation. The reservoir has no discharge structure. There is a drainage ditch that extends from the southeast corner of the reservoir into the Devil's Garden Slough. The Devil's Garden Slough enters the property at the eastern boundary from Basin 26-316-02 and winds west and then south towards Basins 26-301-01 and 26-314-01.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-324-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduce P Fertilization
- Split Nutrient Application
- Particulate Matter and Sediment Controls (4)

Level III (Basin 26-324-01):

- Nutrient Application Control
- Nutrient Spill Prevention





- Soil Testing
- Reduce P Fertilization
- Split Nutrient Application
- Particulate Matter and Sediment Controls (4)
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Level IV (Basin 26-324-01):

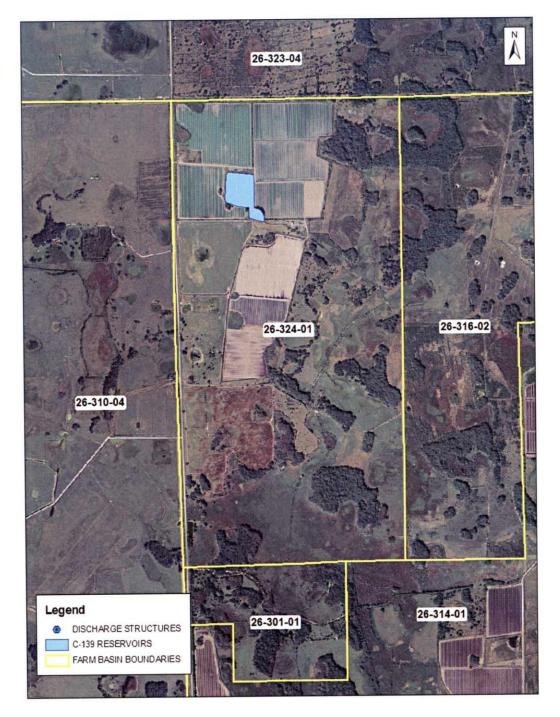
- Approved & Operational Surface Water Reservoir (5.2.1)
- Approved & Operational Surface Water Reservoir (6.2)
- Approved & Operational Surface Water Reservoir (6.3)

Projected Modifications to the Surface Water Management System:

Basin 26-324-01 has been authorized to construct a surface water management system to serve 349.9 of the 1,284 acre agricultural development known as Golden Ox for 201.8 acres of irrigated farm area, 70.1 acres of detention area, and 77.5 acres of non-irrigated farm area and conceptual approval of 228.1 acres of future agricultural development with discharge to the CR 833 ditch via on-site slough conveyance system. The ERP permit also indicates a proposed 24-inch culvert extending 12 feet underneath a driveway at the northwest corner of the property directing runoff from the north of the CR 833 ditch to the ALICO Canal, a proposed 36-inch culvert at the west edge of the basin extending 50-feet underneath CR 833 directing runoff to the Deer Fence Canal, and a 24-inch culvert extending 20-feet underneath the boundary driveway at the southwest corner of the property directing runoff to a ditch that runs along CR 833.

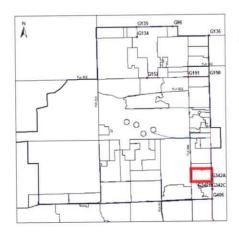
The permit 26-00768-P was issued on May 11, 2005.





Aerial of Basin 26-324-01





C-139 Everglades WOD Permit Number: **26-00325-E (CLOSED)**

OceanBoy Farms

Area:

Basin 26-325-01

1609 acres

Land-use:

Aquaculture and Rangeland (1,609 ac)

Related Permits:

26-00303-S-02

Originally authorized a surface water management system that utilized 2 reservoirs and discharged to the L-3 canal.

26-00373-W

Authorizes an annual allocation of 1,803 million gallons of

groundwater from the Lower Tamiami aquifer for agricultural

irrigation.

Surface Water Management System:

The original surface water permit for the Little Cypress Farm describes two reservoirs providing a total of 203-acres in on-site detention with the discharge structures being a 6' wide and a 3' wide weir both with a crest elevation of 16.5' NGVD.

Since it is an aquaculture operation, OceanBoy operates under a Florida Department of Agriculture and Consumer Services (FDACS) license. The WOD permit was closed October 25, 2004.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-325-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (4)

Level IV (Basin 26-325-01):

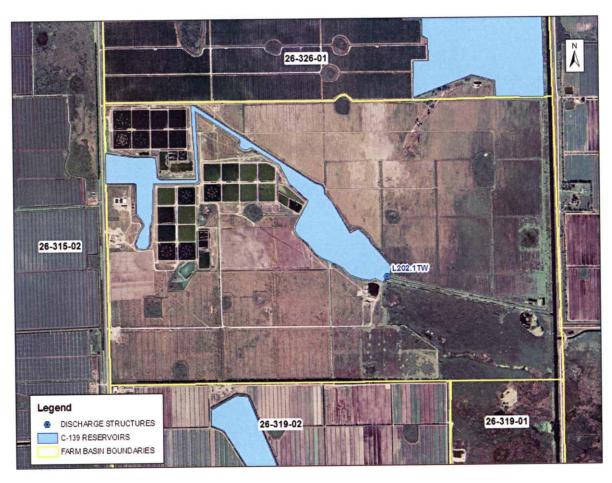
• Nutrient Application Control





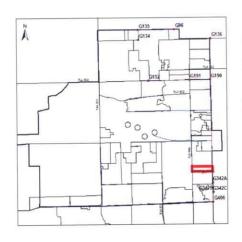
- Nutrient Spill Prevention
- Manage Successive Vegetable Planting
- Plant Tissue Analysis
- Soil Testing
- Particulate Matter and Sediment Controls (8)
- Reduced Flow Through Water Table Management

Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-325-01





C-139 Everglades WOD Permit Number: **26-00326-E**

K.T. John Little Cypress Grove

Area:

Basin 26-326-01

644 acres

Land-use:

Citrus (644 ac)

Related Permits:

26-00303-S-02 Authorized a surface water management system to serve the

entire property now occupied by K.T. John and Ocean Boy Farms. The reservoir listed as Reservoir 4 is for the Little Cypress Grove which is now the K.T. John Little Cypress

Groves property.

26-00373-W

Authorizes an annual allocation of 1,529 million gallons of

groundwater from the water table aquifer.

Surface Water Management System:

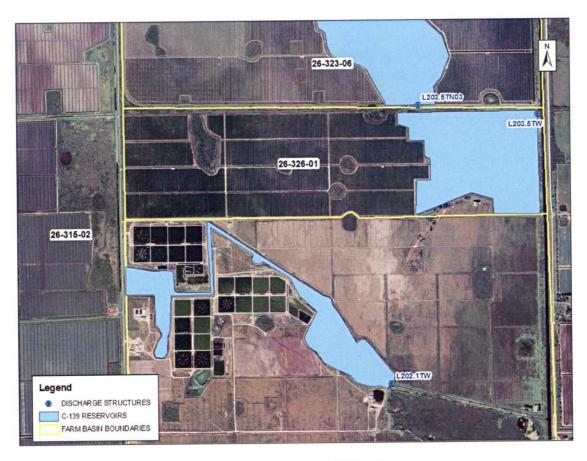
The reservoir planned in the original permit for Little Cypress Grove is partially completed utilizing grant funding from the SFWMD. The groves currently drain into a system of internal canals and are then pumped into the 166-acre reservoir. The reservoir outfall is planned to be a 3' wide weir with a crest elevation of 16.5' NGVD. This outfall has yet to be completed.

Best Management Practices (BMP) Plan:

CLOSED

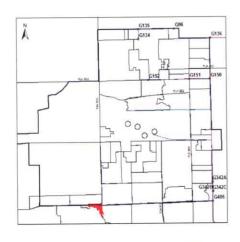
Projected Modifications to the Surface Water Management System:





Aerial of Basin 26-326-01





C-139 Everglades WOD Permit Number: **26-00327-E**

Duck Curve Farm

Area:

Basin 26-327-01

Basin 26-327-02

37 acres

84 acres

Land-use:

Vegetables (37 ac) and Improved Pasture (84 ac)

Related Permits:

26-00533-S Authorizes a surface water management system where 121.3 acres of the property discharges to the Deer Fence Canal and 145.1

acres discharge into the Boggy Slough.

26-00533-W Authorizes an annual allocation of 434 million gallons of

groundwater from the Lower Tamiami aquifer.

Surface Water Management System:

Discharge from Basin 26-327-01 is pumped into an internal canal in Basin 26-327-02. The pump has a capacity of 5,000 GPM and an on/off elevation of 24.0'/23.0' NGVD. This canal flows through the north cattle field (Basin 26-327-02) and under CR 845 and into the Deer Fence Canal. Discharge from the west and center portions of Basin 26-327-02 sheet flow through the pasture as discharge from Basin 26-327-01. Discharge from the eastern portions of Basin 26-327-02 sheet flow directly into the Deer Fence canal.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-327-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduced Flow Through Water Table Management

Level III (Basin 26-327-01):





- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (6)
- Reduced Flow Through Water Table Management

Level IV (Basin 26-327-01):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Particulate Matter and Sediment Controls (8)
- Water Management (0.5-inch)
- Reduced Flow Through Water Table Management

Level I and II (Basin 26-327-02):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Reduced Placement of Cowpens
- · Restricted Placement of Feed and Water

Level III (Basin 26-327-02):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- No Nutrients Imported Indirectly Through Cattle Feed
- Reduced Placement of Cowpens
- Restricted Placement of Feed and Water

Level IV (Basin 26-327-02):

- Nutrient Application Control
- Nutrient Spill Prevention
- Soil Testing
- Split Nutrient Application
- No Nutrients Imported Indirectly Through Cattle Feed
- · Reduced Placement of Cowpens
- Restricted Placement of Feed and Water

Projected Modifications to the Surface Water Management System:

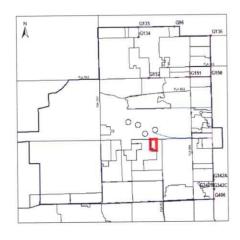






Aerial of Basins 26-327-01 and 26-327-02





C-139 Everglades WOD Permit Number: **26-00328-E**

Seminole Tracks, Inc.

Area:

Basin 26-328-01

404 acres

Land-use:

Race track (55 ac) and Rangeland (348 ac)

Related Permits:

26-00775-P Authorizes a surface water management system that discharges to the ALICO South Boundary canal and the L-2 canal.

26-00069-W Authorizes an annual allocation of 354 million gallons of groundwater from the Lower Tamiami aquifer for agricultural irrigation.

Surface Water Management System:

The current drainage conditions of the land is sheet-flow into a single internal canal that drains the property to the north and out to the L-2 canal by way of the ALICO South Boundary Canal. Off-site discharge from the internal canal is through a 0.41' circular orifice with the invert elevation set at 25.2' NGVD. There is no detention storage on the site yet. The internal canal does not only convey runoff from the site, but it also receives discharge from neighboring farms to the west (26-308-01) through a gated culvert structure.

Best Management Practices (BMP) Plan:

Level I and II (Basin 26-328-01):

- No Nutrients Imported via Direct Land Application
- Approved and Operational Surface Water Reservoir

Level III (Basin 26-328-01):

- No Nutrients Imported via Direct Land Application
- Approved and Operational Surface Water Reservoir
- No Direct Discharge





Level IV (Basin 26-328-01):

- No Nutrients Imported via Direct Land Application
- Approved and Operational Surface Water Reservoir
- Particulate Matter and Sediment Controls (4)
- No Direct Discharge

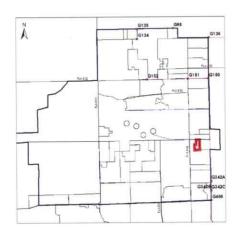
Projected Modifications to the Surface Water Management System:



Aerial of Basin 26-328-01







C-139 Everglades WOD Permit Number: NO NOTICE OF GENERAL PERMIT

Eckerd Family Youth Alternatives, Inc.

Area:

Basin 1

270 acres

Land-use:

Wilderness Camp

Related Permits:

26-00160-S Authorizes a water management system serving 270 acres of wilderness camp and access road by a roadside ditch and 4-29" x 18" ERCP culverts discharging via natural sheetflow into Little Cypress Swamp. In 1986, this permit was modified to include construction of swales and a control structure that directs flow away from upland areas to the southern corner of the site.

Surface Water Management System:

Runoff is directed via swales to the southeastern corner of the property. There is an onsite detention area designed to hold a minimum of one inch of runoff. The discharge structure for this detention area is an 11.32' wide weir with a crest at elevation 16.5' NGVD. The discharges are then directed to the L-2 Canal via drainage easement along the north side of Basin 26-323-06.

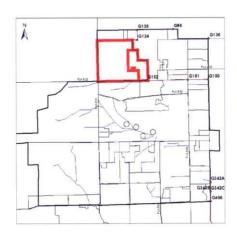
Projected Modifications to the Surface Water Management System:





Aerial of the Eckerd Family Youth Alternatives, Inc. Property





C-139 Everglades WOD Permit Number: NO NOTICE OF GENERAL PERMIT

Montura Ranch Estates and the Central County Drainage District Reservoir

Area:

Montura Ranch Estates

8.640 acres

Central County Drainage District Reservoir

2,560 acres

Land-use:

Residential (8,640 acres) and Reservoir (2,560 ac)

Related Permits:

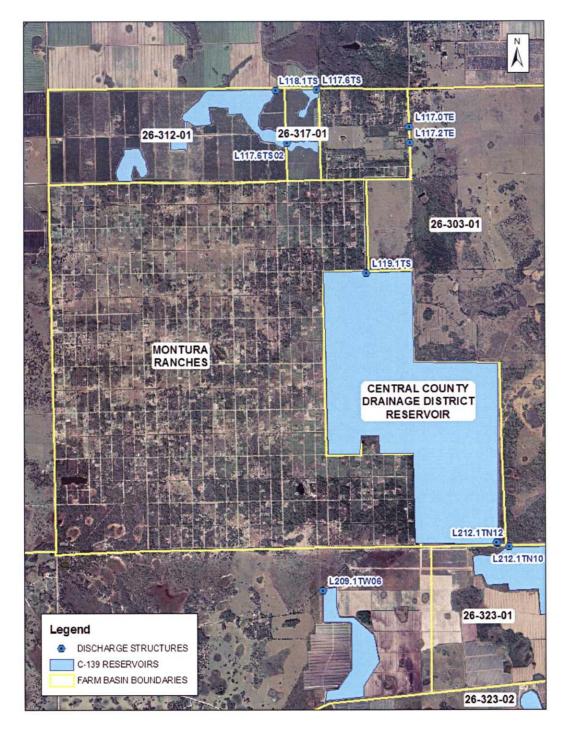
26-00156-S Authorizes modifications to an existing water management system serving approximately 13.5 square miles of residential lands by 12-25,000 GPM pumps, 1-4 square mile retention area and 2-72" CMP culverts discharging into Flaghole Road Ditch, Alignment "A".

Surface Water Management System:

In 1968 the Central County Water Control District was created and incorporated. In 1970 construction began on the Montura Ranch Estates interior canal system, including the pumping stations into the 2,560 acre Central County Drainage District reservoir. The reservoir outfall was temporarily constructed in the northern berm utilizing 2-72" CMP culverts discharging north into Flaghole Road Ditch. In June 1982, Montura Ranches experienced severe flooding. The stages within the 2,560 acre reservoir were above safe elevations for the existing berm. The pumps from the internal canals were turned off and the residents were evacuated. The current configuration of the surface water management system includes a discharge structure (2-72" CMP culverts) from the southeast corner of the reservoir in addition to the northern outfall. The permit describes the system being maintained with a control elevation of 18.7' NGVD. The southern outfall structure discharges to the L-2W canal on the tailwater (east) side of the G-152 as is shown within this appendix in the photograph on page A-72.

Projected Modifications to the Surface Water Management System:





Aerial of Montura Ranch Estates and the Central County Drainage District Reservoir

